

IN THE CLAIMS:

Please cancel claims 2 and 6 without prejudice or disclaimer, and amend claims 1 and 3-5, and 7-10, and add new claims 11-15 as follows:

1. (Currently Amended) A data delivery server connected to a mobile terminal by way of a network for delivering an IP packet having data packets recorded internally of payload, comprising:

a search module for determining a maximum value of a size of one IP packet capable of passing through a channel on said network extending from said data delivery server to said mobile terminal,

a packet generating module for determining ~~[[the]]~~ a number of said data packets to be stored in the payload of the IP packet on the basis of said maximum value of a size of one IP packet and for storing to thereby implement the determined number of said data packets ~~internally of~~ into the payload of said IP packet thereby generating said IP packet without fragmenting said IP packet, [[and]]

an input/output unit for delivering said IP packet generated by said packet generating module, and

a move detecting module designed for accepting a move message of said mobile terminal,

wherein said search module determines said maximum value of a size of one IP packet depending upon a current channel on a current network connecting between said data delivery server and said mobile terminal after a move of said mobile terminal by sending out one or more search packets each of which excludes data to be included in the payload of said IP packet, when the move of said mobile terminal is detected by said move detecting module.

2. (Cancelled)

3. (Currently Amended) A data delivery server according to claim ~~[[2]]~~1,

wherein said mobile terminal corresponding to MobileIP, and

wherein said move detecting module is so designed as to accept a message of the move of said mobile terminal sent from a home agent of said mobile terminal defined by said MobileIP.

4. (Currently Amended) A data delivery server according to claim 1,
wherein said search module determines said maximum value of a size of one IP packet by transmitting a plurality of search packets of different data quantities toward said mobile terminal.
5. (Currently Amended) A data delivery software embedded in a computer readable storage medium to carry ~~capable of carrying out~~ [[a]] data delivery method with a computer including a [[CPU]] microprocessor and an input/output unit, comprising the steps of:
a module for determining with said [[CPU]] microprocessor a maximum value of data quantity capable of being transferred with one IP packet by way of a path on a network extending from a server to a mobile terminal;
a module for determining with said CPU the microprocessor a number of data packets to be stored internally of the payload of said IP packet on the basis of said maximum value of data quantity;
a module for storing implementing with said [[CPU]] microprocessor the determined number of said data packets ~~internally of~~ into the payload of said IP packet thereby generating said IP packet without fragmenting said IP packet; [[and]]
a module for delivering the generated IP packet from said input/output unit;
and
a module for accepting a move message of said mobile terminal,
wherein said module for determining said maximum value of data quantity depending upon a current channel on a current network connecting between said server and said mobile terminal after a move of said mobile terminal by sending out one or more search packets each of which excludes data to be included in the payload of said IP packet, when the move of said mobile terminal is detected via accepting the move message.
6. (Cancelled)
7. (Currently Amended) [[A]] The data delivery software ~~capable of carrying out the data delivery method with the computer~~ according to claim 5,
wherein said mobile terminal ~~being a mobile terminal corresponding~~ corresponds to MobileIP,

wherein a move message of ~~said terminal is a move message of~~ said mobile terminal is sent from a home agent of said mobile terminal.

8. (Currently Amended) A data delivery system comprised of a server for delivering data including ~~one or plural~~ data packets additionally recorded internally of payload of an IP packet and a mobile terminal connected to said server by way of a network for receiving said data,

wherein either said server or said mobile terminal comprises:

a move detecting module designed for accepting a move message of said mobile terminal,

a search module for determining a maximum value of data quantity capable of being transferred with one IP packet by way of a path on said network extending from said server to said mobile terminal;

a packet generating module for determining a number of said data packets to be stored in the payload of the IP packet on the basis of said maximum value of data quantity and for structuralizing said determined number of data packets ~~internally of~~ into the payload of said IP packet thereby generating said IP packet without fragmenting said IP packet; [[and]]

an input/output unit for delivering said IP packet generated by said packet generating module, [[and]]

wherein said search module determines said maximum value of data quantity depending upon a current channel on a current network connecting between said server and said mobile terminal after a move of said mobile terminal by sending out one or more search packets each of which excludes data to be included in the payload of said IP packet, when the move of said mobile terminal is detected by said move detecting module ~~said terminal comprises an input/output unit for receiving the data delivered from said server.~~

9. (Currently Amended) A data delivery system according to claim 8,

wherein said search module determines said maximum value of data quantity by transmitting a plurality of search packets of different data quantities toward said mobile terminal.

10. (Currently Amended) A data delivery system according to claim 8,

wherein when said server comprises the modules, said server further includes a mobile terminal cooperation module in place of said search module,

said mobile terminal further comprises a search module for determining a maximum value of data quantity capable of being transferred by one IP packet by way of a path on said network extending from said mobile terminal to said server,

said mobile terminal cooperation module of said server is so arranged as to acquire from said mobile terminal information concerning said maximum value of data quantity determined by said search module of said mobile terminal, and

wherein the packet generating module incorporated in said server determines the number of said data packets to be stored internally of the payload of said IP packet on the basis of said maximum value of data quantity determined by said mobile terminal cooperation module, to thereby structuralize said determined number of data packets internally of the payload of said IP packet.

11. (New) A data delivery server according to claim 1, wherein said search module determines said maximum value of a size of one IP packet by transmitting a ping packet as a search packet toward said mobile terminal.
12. (New) The data delivery software according to claim 5, wherein said search module determines said maximum value of data quantity by transmitting a ping packet as a search packet.
13. (New) The data delivery software according to claim 5, wherein said module for determining said maximum value of data quantity determines by transmitting a plurality of search packets of different data quantities.
14. (New) A data delivery system according to claim 8, wherein said search module determines said maximum value of data quantity by transmitting a ping packet as a search packet.

15. (New) A data delivery system according to claim 8, wherein said mobile terminal corresponding to MobileIP, and

wherein said move detecting module is so designed as to accept a message of the move of said mobile terminal sent from a home agent of said mobile terminal defined by said MobileIP.